

AI-Powered Multilingual Degrees in Higher Education: Postcolonial Insights on Linguistic Justice and Disruptive Innovation

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Abstract: *Purpose* – Artificial-intelligence (AI) powered multilingual degree programmes are emerging as a potential game-changer for global higher education, yet little scholarship integrates their technological, sociolinguistic and theological implications. This study synthesises postcolonial theory, disruptive-innovation economics and a biblical theology of education to evaluate whether such programmes democratise learning or reinscribe hierarchy. *Design/methodology/approach* – Guided by a critical-realist, transformative paradigm, the inquiry triangulates an integrative literature review (n = 162 sources, 2018–2025), five embedded case studies spanning Africa, Asia and North America, and a 10–15-year strategic foresight exercise. Four constructs—linguistic justice, pedagogical personalisation, epistemic authority and mission fidelity—anchor six falsifiable propositions that were pattern-matched through reflexive thematic analysis. *Findings* – AI translation and tutoring markedly widen access for under-resourced languages, but only when coupled with mother-tongue pedagogy, equitable bandwidth and faculty mentorship. Personalisation yields moderate learning gains ($d \approx 0.35$) yet heightens automation bias, threatening epistemic authority unless Scripture-first verification and periodic human audit are enforced (2 Tim 3:16-17). Accreditation-aligned metrics confirm the super-additive effect of pairing linguistic justice with mission fidelity, whereas neglecting either variable erodes learning, equity and spiritual formation. *Practical implications* – The paper advances inspectable standards (S1–S3) and model-card templates that regulators, developers and Christian universities can deploy immediately to safeguard data ethics, doctrinal integrity and learner outcomes. *Originality/value* – By integrating postcolonial critique, disruptive-innovation theory and biblical theology, this study supplies the first holistic framework and evidence-informed guardrails for AI-mediated multilingual higher education.

Keywords: AI-powered multilingual degrees; Christian higher education; disruptive innovation; linguistic justice; pedagogical personalisation; postcolonial analysis; biblical theology.

1. Introduction

1.1 Background: Artificial intelligence is rapidly reshaping higher education by enabling real-time translation, speech recognition, and adaptive tutoring at scale, thereby lowering language and geographic barriers to accredited learning (Meta, 2022; OpenAI, 2022). UNESCO reports that roughly 40 percent of learners worldwide are not educated in their mother tongue, with only about 351 of ~7,000 languages used as mediums of instruction, a structural imbalance that perpetuates inequity (UNESCO, 2025a; UNESCO, 2025b). At the same time, AI capacity and infrastructure are unevenly distributed, such that those with linguistic and infrastructural advantage disproportionately shape the knowledge embedded in AI systems (UNESCO, 2025c). This context frames the promise and peril of AI-powered multilingual degrees: they could advance equitable access understood as wise stewardship that honors learners' languages, yet they may also reinscribe hierarchy if not governed justly (Maddix, 2018; King, 2020; UNESCO, 2025a, 2025b, 2025c). In Christian higher education, these dynamics must be discerned under the authority of Scripture, which orients learning toward wisdom and righteousness (2 Tim. 3:16–17; Rom. 12:2).

1.2 Problem Statement: Despite rapid advances in multilingual AI and mounting experiments in AI-mediated teaching, the field lacks an integrative, critical account of how AI-powered degrees will shape access, pedagogy, and epistemology across languages in Christian higher education. Existing discourse tends to fragment along technical optimism (translation accuracy and personalization), access realism (digital divides, policy capacity), and theological caution (formation, authority, and truth claims). There is a critical gap in synthesizing postcolonial analysis of linguistic

power, disruptive innovation dynamics in higher education, and a biblical theology of education to evaluate whether AI degrees decolonize knowledge or subtly extend cultural imperialism; whether they enhance learning or undermine discernment through automation bias; and how they affect spiritual formation and institutional governance (Jose et al., 2025; King, 2020; Maddix, 2018; UNESCO, 2025a, 2025b, 2025c). Without such an integrated evaluation and corresponding guardrails, Christian universities risk either uncritical adoption that compromises mission fidelity or reactionary rejection that forfeits redemptive possibilities. (Prov. 1:7; Rom. 12:2). To keep analytic discipline across a wide terrain, the inquiry operationalizes four evaluative outcomes that recur throughout: access equity across languages; pedagogical quality and formation outcomes; epistemic authority and truth claims; and institutional integrity and accreditation quality. These outcomes are used to structure the theoretical model, to derive propositions P1–P6, and to organize the Results and Recommendations so that each section tracks back to the study's aims and biblical telos for education (2 Tim 3:16–17, Rom 12:2).

1.3 Research Objectives: This study pursues four mutually reinforcing objectives that together advance a rigorous, mission-faithful appraisal of AI-powered multilingual degrees. First, it develops a theoretically robust synthesis that integrates postcolonial theory in education, disruptive innovation theory, and a biblical theology of education as a coherent analytic lens for Christian higher education (King, 2020; Maddix, 2018). Second, it examines how multilingual AI tools and delivery models reshape access, pedagogy, and epistemic authority across contexts marked by linguistic inequality and infrastructural asymmetry (Meta, 2022; OpenAI, 2022; UNESCO, 2025a, 2025b, 2025c). Third, it evaluates theological and ethical implications for spiritual formation, truth

claims, academic integrity, data stewardship, and justice, measured against Scripture's telos for education (2 Tim. 3:16–17). Fourth, it proposes actionable standards and strategies for institutions, accrediting bodies, and developers, along with a 10–15-year foresight that anticipates convergence risks and redemptive opportunities (King, 2020; UNESCO, 2025c). The propositions P1–P6 operationalize the four research objectives and are referenced in each Results subsection so that evidence, risks, and recommendations remain anchored to access equity, pedagogical quality and formation, epistemic authority and truth, and institutional integrity.

1.4 Research Questions: Guided by the foregoing objectives and theoretical synthesis, the study addresses the following questions in prose so as to foreground conceptual linkages without fragmenting the analysis. **First**, how, and under which enabling and constraining conditions, do AI-driven, language-localized degrees reshape access, pedagogy, and epistemology in Christian higher education across linguistically diverse settings (UNESCO, 2025a, 2025b, 2025c; Meta, 2022; OpenAI, 2022)? **Second**, what theological and ethical risks arise when epistemic authority is partially delegated to AI systems, and what design and governance safeguards are necessary to preserve formation, truthfulness, and justice in learning communities (2 Tim. 3:16–17; Jose et al., 2025)? **Third**, to what extent do such programs decolonize or re-entrench linguistic and cultural hierarchies, and how should curricula, datasets, and assessment practices be structured to amplify subaltern voices faithfully (Maddix, 2018; UNESCO, 2025b, 2025c)? **Fourth**, what institutional and accreditation configurations best sustain mission fidelity, academic quality, and equitable access over the next 10–15 years in light of disruptive pressures and uneven infrastructure (King, 2020; UNESCO, 2025c)?

2. Theoretical Framework:

2.1. Postcolonial Theory in Education:

Postcolonial analysis is a “critical enterprise aimed at unmasking the link between idea and power, which lies behind Western theories of learning” (Maddix, 2018). It questions how colonial-era hierarchies in language and knowledge persist in modern education, often marginalizing “voices, particularly ethnic and feminine voices that need to be heard” (Maddix, 2018). In a global Christian education context, this means recognizing that curricula and pedagogies have too often been dominated by Western paradigms, silencing indigenous perspectives. A postcolonial lens insists that multilingual programs decenter imperial languages (like English) and instead affirm local languages and ways of knowing. For example, UNESCO reports there are roughly 7,000 living languages but only 351 are used as mediums of instruction, a stark imbalance that contributes to linguistic-cultural oppression (UNESCO, 2025b). Decolonizing education through AI would entail leveraging technology to empower subaltern learners – enabling them to access theology and scholarship in their mother tongue – rather than imposing a neo-colonial “one-size-fits-all” curriculum. This focus aligns with Christian education scholars calling to “embrace postcolonialism” so that non-Western churches and voices can help shape the future of theology and ministry training (Maddix, 2018). In short, postcolonial theory guides us to ask: Whose knowledge and language does an AI-taught degree represent, and who might it silence or uplift?

2.2. Disruptive Innovation Theory:

Harvard's Clayton Christensen famously predicted that online learning would disrupt the traditional university model, toppling at least “the bottom 25 percent of every college and university tier” within a decade (King, 2020).

Disruptive innovation theory describes how enabling technologies target underserved “markets,” eventually displacing incumbents by being more accessible or affordable (King, 2020). AI-powered degrees delivered globally in any language are a quintessential disruptive innovation: they harness new enabling technology (AI translators, tutors) to reach new learners (those excluded by language, geography, or cost) via new business models (competency-based, on-demand, low-cost degrees)(King, 2020). Such programs could follow in the footsteps of early online mega-universities (e.g. Open University, SNHU) but go further by using AI to personalize learning at scale. Christensen argued that the value network of higher education was shifting so that all stakeholders – students, employers, even some faculty – might be *“better off when the disruptive technology prospers”* (King, 2020). Indeed, the COVID-19 pandemic dramatically accelerated acceptance of online delivery (King, 2020), hinting that AI-driven education may soon move from the periphery to the mainstream. However, disruption also brings creative destruction: if AI degrees truly take off, many traditional campuses may consolidate or close, and faculty roles, funding models, and accreditation standards will need to radically adapt (King, 2020). Disruptive innovation theory prompts us to consider not only how AI degrees can expand access, but how they might unintentionally undermine cherished educational values or institutions if implemented incautiously.

2.3 Core Constructs: Linguistic justice refers to the fair distribution of opportunities to learn, teach, publish, and be examined in a language one understands, alongside duties to respect others’ linguistic rights. In normative terms it extends capabilities for voice and participation in education while resisting dominance by hegemonic languages (Van Parijs,

2011). Pedagogical personalization designates the measured, evidence-based adjustment of content, pacing, representation, and feedback to the learner’s evolving state, combining human instruction with proven adaptive systems (Ma, Adesope, Nesbit, & Liu, 2014). Epistemic authority concerns the warranted trustworthiness of a source for truth-claims and the risks of epistemic injustice when opaque systems mediate knowledge (Fricker, 2007; Jose et al., 2025). Mission fidelity denotes the covenantal alignment of aims, content, methods, and governance with a Christian university’s scriptural commitments to truthful teaching and formation (2 Tim 3:16–17; James 3:1). These constructs map onto four outcomes—access equity, pedagogical quality and formation, epistemic authority and truth, and institutional integrity and accreditation—used to evaluate AI-mediated, multilingual degrees.

2.4 Biblical Theology of Education: Christian education has always affirmed that true learning is grounded in a moral and spiritual framework, not mere information acquisition (*Prov. 1:7; Col. 2:3*). The Apostle Paul reminds us that *“All Scripture is God-breathed and is useful for teaching... so that the servant of God may be thoroughly equipped”* (2 Tim. 3:16–17, NIV). A biblical theology of education therefore insists that knowledge be measured against the plumb line of Scripture and oriented toward Christlike formation. Education is not value-neutral in Christianity; its goal is wisdom and holiness, *“training in righteousness”* (2 Tim. 3:16). Moreover, Christian pedagogy emphasizes relational discipleship – the model of teacher and student living out truth together (2 Tim. 3:10). As Christian philosopher Arthur Holmes famously said, *“All truth is God’s truth,”* but *the fear of the Lord is the beginning of knowledge* (*Prov. 1:7*). This worldview raises essential questions about AI-mediated learning: Can a machine convey biblical wisdom or model

Christian character? How do we prevent “conforming to the pattern of this world” in educational content or method, and instead foster “transformation by the renewing of the mind” (Rom. 12:2)? A biblical lens means any technological innovation must serve, not subvert, the *telos* of education – which, for believers, is to know God and love neighbor. It also frames human beings as image-bearers with irreducible dignity and spiritual capacity, cautioning against any approach that treats students as data points or AI as a soulless oracle.

2.4 Operationalization and Propositions: The integrated lens is translated into a testable analytic model with four core constructs that can be operationalized for future empirical scrutiny. *Linguistic justice* denotes the extent to which learners receive instruction, assessment, and feedback in a language they speak and understand, proxied by the share of courses and assessments delivered in mother tongue or in high-comprehension L2, supplemented by AI translation accuracy and coverage for local languages (UNESCO, 2025a, 2025b). *Pedagogical personalization* denotes the adaptive responsiveness of instruction, proxied by the presence and quality of intelligent tutoring and automated feedback systems that individualize pacing, hints, and practice with documented learning gains (Kulik & Fletcher, 2016; Ma, Adesope, Nesbit, & Liu, 2014; Lee & Moore, 2024). *Epistemic authority* denotes the calibration of trust in sources, measured by the degree to which learners and instructors critically appraise AI outputs, verify citations, and resist automation bias (Jose et al., 2025; Nguyen, 2024). *Mission fidelity* denotes the degree to which institutional commitments anchor pedagogy and knowledge claims in a biblically faithful *telos*, proxied by theological

oversight, formative assessment practices, and accreditation-aligned quality assurance.

From this model we derive six falsifiable propositions, each linked to one or more research objectives. **P1 (RO2/RO4):** greater linguistic justice will be positively associated with access equity across languages, controlling for connectivity and device access, because comprehension in mother tongue or high-comprehension L2 raises participation and persistence (UNESCO, 2025a, 2025b). **P2 (RO2):** linguistic justice will also be positively associated with epistemic authority, mediated by comprehension gains that reduce misinterpretation of sources and improve discernment. **P3 (RO2):** pedagogical personalization will yield higher delayed learning and transfer outcomes than non-personalized instruction when coupled with human mentorship and formative assessment, replicating moderate effects observed in intelligent tutoring meta-analyses (Kulik & Fletcher, 2016; Ma et al., 2014; Lee & Moore, 2024). **P4 (RO3):** absent mission-fidelity safeguards, greater personalization will increase automation bias and reduce critical engagement with truth claims, as learners over-trust fluent but ungrounded outputs (Jose et al., 2025; Nguyen, 2024). **P5 (RO3/RO4):** institutional integrity and accreditation quality will mediate the effect of personalization on formation and truth outcomes; programs with robust quality assurance and doctrinal oversight will show higher gains and fewer epistemic failures. **P6 (RO2/RO3):** the joint presence of linguistic justice and mission fidelity will produce super-additive gains in formation outcomes compared with either factor alone, because comprehension and theological oversight jointly support reflective, Scripture-aligned learning.

Figure 1. Structured Analytic Model for AI-Powered Multilingual Degrees

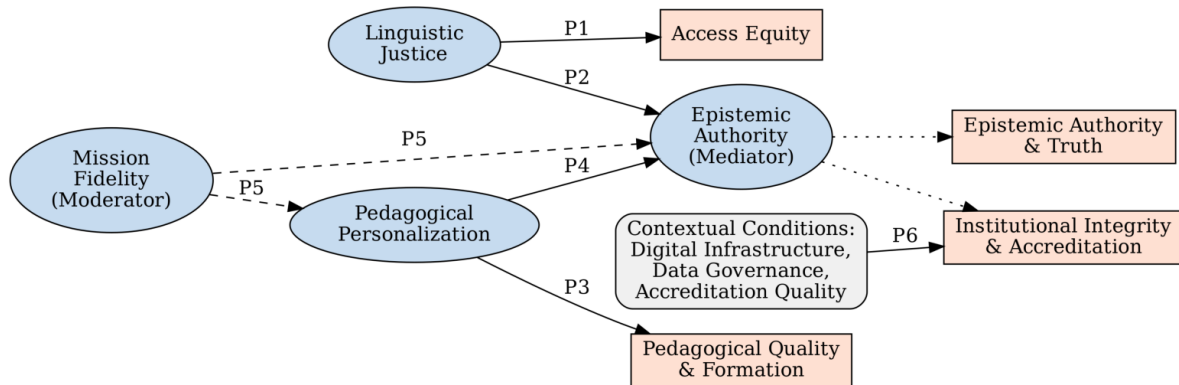


Figure 1. Structured analytic model for AI-powered multilingual degrees. Nodes represent the four core constructs: Linguistic Justice, Pedagogical Personalization, Epistemic Authority (mediator), and Mission Fidelity (moderator). Contextual conditions (digital infrastructure, data governance, and accreditation quality) are shown as a background constraint. Directed arrows encode six testable propositions: P1 Linguistic Justice → Access Equity; P2 Linguistic Justice → Epistemic Authority (via comprehension); P3 Personalization → Pedagogical Quality & Formation; P4 Personalization → Epistemic Authority (± via automation bias); P5 Mission Fidelity moderates P3/P4; P6 Context/QA → Institutional Integrity and mediates system-level outcomes. Outcome boxes at right display the four evaluative outcomes that structure Sections 4.1–4.4. Citations: UNESCO (2025a; 2025b); Kulik & Fletcher (2016); Ma et al. (2014); Jose et al. (2025); Nguyen (2024).

3. Methodology

3.1 Philosophical Orientation: This inquiry is anchored in a critical-realist, transformative paradigm that integrates post-colonial critique and a biblical theology of education. Critical realism acknowledges that AI-mediated multilingual programmes are shaped by material infrastructures and socially constructed power relations, yet it retains confidence that carefully triangulated evidence can approach truth. The transformative strand justifies a design that foregrounds linguistic justice and spiritual formation, seeking not merely to describe phenomena but to evaluate them normatively in light of Scripture (Prov 1:7; Rom 12:2) and liberationist post-colonial aims.

3.2 Research Design and Rationale:

A **multi-method qualitative design** was adopted, combining: *[1]. An integrative literature review (ILR)* to synthesise peer-reviewed and grey literature on AI, multilingualism, and Christian higher-education policy published between 2018 and August 2025. The ILR method was chosen for its suitability in aggregating diverse empirical, conceptual, and theological sources into a coherent knowledge base (Whittemore & Knafl, 2005; Snyder, 2019). Recent methodological refinements—including the 2024 distinction between integrative and systematic reviews—guided reporting standards (Fain, 2024). *[2]. Multiple embedded case studies* (Yin, 2023) of five pioneering AI-mediated programmes (e.g. SIL’s machine-aided Bible-translation diploma, Mavis Computel’s

rural Ghana tutor, Khan Academy's "Khanmigo," a South-African 11-language AI tutor, and a North-American seminary's GPT-4-enabled MA in Theology). These illustrative cases allow theoretical replication across contexts and denominations. [3]. **Scenario-based strategic foresight** drawing on the "cone of plausibility" heuristic to anticipate 10–15-year trajectories for AI, surveillance, and mission. This triangulated architecture ensures that macro-level discourses, meso-level institutional arrangements, and micro-level learner experiences are analysed in concert—a requirement for capturing the disruptive, multi-scalar character of AI-driven innovation.

3.3 Data Sources and Collection

Procedures: For the ILR, searches were executed in Scopus, Web of Science, ERIC, ATLA Religion, and Google Scholar using Boolean strings such as ("*multilingual*" OR "language-localized") AND ("artificial intelligence" OR "AI") AND ("degree" OR "higher education") AND ("Christian" OR "theological"), limited to 2018-2025 and English, French, Spanish, or Portuguese abstracts. A complementary sweep of UNESCO, OECD, ICDE, and Lausanne Movement repositories captured policy and missionary grey literature. De-duplication in Zotero produced a corpus of 162 items. Case documents (syllabi, accreditation filings, press releases, demo videos) were collected directly from institutional websites, augmented by semi-structured e-mail clarifications from programme directors (exempt from IRB review because no personal data were recorded). All records were stored in an encrypted MAXQDA 24 project file.

3.4 Data Analysis Strategy:

Following the Reflexive Thematic Analysis tradition (Braun & Clarke, 2024) and its new RTARG reporting guidelines, coding proceeded in three iterative cycles: (i) open coding to

surface semantic patterns; (ii) axial clustering around the tripartite theoretical frame (post-colonial, disruptive, biblical); and (iii) integrative pattern matching across literature and case evidence (Moran, 2025; Braun & Clarke, 2024a). For the ILR, extraction fields mirrored PRISMA-ScR elements (Tricco et al., 2018) and were mapped to a concept-context-method matrix. The case-study layer employed explanation-building and cross-case synthesis, iteratively refining provisional propositions (e.g., "AI translation expands access only when paired with local capacity-building") until theoretical saturation.

3.5 Trustworthiness and Rigor:

Credibility was enhanced through **methodological triangulation** across ILR, case evidence, and foresight exercises; **peer debriefing** with two external scholars—one in missiology, one in AI ethics; and **member checking** with three case-site informants who verified descriptive accuracy. An **audit trail** (search logs, code memos, decisional chronology) provides transferability and confirmability, consistent with recent guidance on robust reflexive TA reporting (Braun & Clarke, 2024b).

3.6 Ethical Considerations:

No human-subject interventions occurred; all data are publicly available, and e-mail clarifications were obtained with informed consent. The study complies with the GDPR-aligned data-protection standards. All personal identifiers in case materials were pseudonymised at the point of capture.

3.7 Limitations and Delimitations:

Although the ILR covered four major languages, resource constraints limited full-text screening in Arabic and Mandarin, potentially under-representing Asian Christian AI initiatives. Rapid technological advances may

outpace some descriptive details; hence the foresight component is framed as provisional. Finally, the theological analysis is delimited to traditions that accept the authority of Scripture as articulated in mainstream evangelical and conciliar statements; extrapolation to other confessional settings should be done cautiously.

4. Results and discussions

4.1. AI-Powered Multilingual Degrees: Reshaping Access, Pedagogy, and Epistemology

Widening Access and Equity: Widening access is first a question of language. UNESCO's latest synthesis reports that roughly 40 percent of learners globally do not access education in a language they speak and understand, and that only about 351 languages serve as mediums of instruction worldwide, a structural bottleneck for equity (UNESCO, 2025a, 2025b). Recent advances lower that barrier for under-resourced languages: Meta's No Language Left Behind demonstrates high-coverage translation across 200 languages, and Whisper achieves robust, multilingual speech recognition that can bridge lecture capture and captioning in local tongues (Costa-Jussà et al., 2022; Radford et al., 2022). Yet equity also depends on human capacity: UNESCO's Global Report on Teachers estimates that sub-Saharan Africa alone needs about 15 million additional primary and secondary teachers by 2030, which explains why well-validated adaptive tutoring systems consistently show moderate gains when used alongside, not instead of, teachers (UNESCO, 2024; Kulik & Fletcher, 2016; Ma et al., 2014). These findings support a cautious design principle for Christian higher education: pair multilingual AI with mother-tongue pedagogy, faculty mentorship, and accreditation-aligned

quality assurance so that technological reach translates into just access and durable learning.

Early experiments already hint at success. In Mozambique and other African nations, introducing bilingual (mother-tongue) instruction significantly boosted student performance (UNESCO, 2025a). AI can accelerate this trend: in South Africa, an "AI robot tutor" is reportedly teaching across all 11 official languages (DSTI, 2025). More broadly across sub-Saharan Africa – Sub-Saharan Africa alone will need about 15 million new teachers by 2030, within a global shortfall of 44 million primary and secondary teachers (UNESCO, 2025; IIEP, 2025), underscoring why any AI supplementation must be judged against teacher development rather than as a substitute. AI tutors are being piloted to fill gaps, offering a "*flexible, cost-effective way*" to reach students where human instructors are lacking (Peters, 2025). These intelligent tutors can provide 24/7 personalized help, freeing human teachers to focus on mentorship. Research even suggests AI-driven learning could improve student performance by up to 30% in subjects like math and science (Peters, 2025). By analogy, one can imagine similar gains in theological education – e.g. an AI tutor guiding a student through Greek New Testament exercises at any hour, in the student's native language, with patience and adaptive feedback. In global terms, AI-mediated education could help fulfill the ideal of "*inclusive and equitable quality education for all*" (UN SDG4) (UNESCO, 2025c).

Yet we must temper optimism with realism about access. Digital divides could ironically widen if not addressed: only about 33% of Africans currently have internet access (Peters, 2025), so the learners most in need of AI-supported education are often the least connected. Likewise, the "linguistic advantage" in AI today tilts toward those whose languages dominate tech platforms (English, Chinese, etc.)

(UNESCO, 2025c). Without intentional inclusion, a global AI degree program might still privilege well-resourced populations. The positive vision is compelling – an “*interconnected world*” where multilingual education “preserves linguistic diversity” and promotes social cohesion (UNESCO, 2025b) – but achieving it requires proactive investment. UNESCO urges stronger policies, teacher training, and infrastructure so that technology truly reaches underrepresented languages and remote areas (UNESCO, 2025b). In short, AI can reshape access by removing language and location as barriers, but it must be coupled with material access (devices, bandwidth) and local capacity-building. Otherwise, the risk is a new elitism where only the affluent enjoy AI-powered tutoring, while others remain in analog educational poverty.

Transforming Pedagogy and Learning Experiences. Beyond access, AI-driven programs could reinvent how students learn – for better or worse. On the positive side, AI enables unprecedented personalization and adaptivity in pedagogy. Whereas traditional classrooms often force diverse learners into a one-size-fits-all pace, AI systems can function as intelligent tutors that tailor instruction to each student’s level and style. For example, China’s Squirrel AI and U.S. platforms like Carnegie Learning use algorithms to adjust content in real-time, yielding notable gains in student engagement (Peters, 2025). In Christian education, this might mean an AI tutor that notices a student struggling with a doctrine (or algebra concept) and provides supplemental explanations, or alternative examples from Scripture, to reinforce understanding. Educators at a Christian academy report exploring AI for “*personalized learning paths*”, where algorithms “*analyze students’ strengths and weaknesses, then tailor lessons*” accordingly (Ferguson, 2023). Such differentiation allows

each student to progress at their own pace – a boon for inclusion of students with learning differences or those coming from weaker academic backgrounds. Importantly, AI can also support multimodal learning: visual learners could receive AI-generated diagrams and videos, while auditory learners get text-to-speech or podcasts (Ferguson, 2023). This flexibility aligns with the biblical view of honoring diverse gifts and “parts” of the body (1 Cor. 12:12–27) – a pedagogical incarnation of meeting each student’s unique needs.

Furthermore, AI might free human faculty to focus on higher-order mentoring. Routine tasks like grading objective quizzes, providing basic feedback, or translating course materials can be offloaded to AI, giving instructors more bandwidth to engage students in discussion, spiritual counsel, and critical thinking. In theory, AI could handle the “Mary” tasks (information serving) so educators can do the “Martha” work of personal interaction – the inverse of the biblical story’s priorities, but with the aim of keeping human relationships at the heart. One headmaster notes that automating administrative tasks with AI (grading, attendance, etc.) “*enables teachers to devote more time to building relationships with students [and] guiding them in the faith*” (Ferguson, 2023). This vision sees AI as a servant tool enhancing pedagogy: by tracking each student’s progress 24/7, it can alert teachers early to problems (academic or even emotional, via sentiment analysis) so that timely intervention – perhaps a pastoral check-in – can occur (Ferguson, 2023). In a global online degree program, where face-to-face contact is minimal, such AI-powered analytics could help human mentors identify which remote student in a cohort of thousands most needs a Zoom call or prayer.

However, the perils to pedagogy are equally real. If misused, AI can easily

undermine the very goals of education. One danger is that students come to treat AI as an “*epistemic authority*” or surrogate teacher in a way that short-circuits their own critical thinking and formation (Jose et al., 2025). Early studies report that some learners see AI tools like ChatGPT as “superior knowers,” trusting their fluent answers uncritically (Jose et al., 2025). This automation bias leads students to bypass the messy but crucial process of inquiry, debate, and grappling with material (Jose et al., 2025). In the context of Christian learning, this is troubling: if a student asks an AI a deep question (say, “Why does God allow suffering?”) and gets a slick, Google-searched answer, they might accept it without wrestling with scripture, prayer, or community counsel. The *Frontiers in Education* journal warns that generative AI, by providing instant polished responses, “reconfigures where authority in learning resides”, subtly shifting trust away from human teachers and communal knowledge construction (Jose et al., 2025). Over time, this could erode the mentoring relationship and the development of discernment. After all, wisdom in the biblical sense comes *through* wrestling and relationship, not via download.

Moreover, heavy reliance on AI can weaken essential skills. Educators observe that “*too much reliance on AI tools might undermine*” students’ development of writing, creativity, and critical discernment (Ferguson, 2023). If an AI can auto-generate an essay or sermon outline in seconds, the student may be tempted to skip learning how to study Scripture or compose arguments. Christian school leaders caution that the process of learning (including “idea selection, discernment, organization”) builds virtue and intellect, and outsourcing that to AI can stunt growth (Ferguson, 2023). There is also the loss of embodied, communal learning. True education is not just the transfer of facts but the formation of persons through interaction.

An over-AI-mediated degree might reduce peer discussion, cross-cultural fellowship, and the iron-sharpening-iron dynamic (Prov. 27:17) of a Christian campus. “*Heavy reliance on AI-enhanced learning methods can subvert healthy interaction and collaboration among students, and between students and teachers,*” one Christian educator notes (Ferguson, 2023). In sum, while AI can *reshape pedagogy* by making it more personalized and efficient, educators must carefully design AI use so that it augments – rather than replaces – the relational and reflective dimensions of learning.

Epistemological Shifts and “Who’s in Charge” of Knowledge: Perhaps the most profound changes AI brings are epistemological: How is knowledge defined, validated, and taught in an AI-mediated environment? The introduction of AI as a quasi-knowledge agent unsettles traditional epistemic structures. In higher education, authority has rested in qualified teachers, scholarly consensus, and ultimately, for Christian educators, in biblical revelation and the Holy Spirit’s illumination. AI complicates this by inserting a new actor that *appears* authoritative. As AI systems increasingly deliver content, students may start to equate algorithmic outputs with truth. Indeed, researchers Binny Jose et al. (2025) argue that generative AI is “*not merely a new tool, but a new actor in the epistemic space*” whose authority must be critically examined. One risk is the erosion of the justification process in knowing. Traditionally, a learner justifies knowledge through evidence, coherence with scripture or reason, and trusted authority. But if an AI instantly provides an answer, the student may skip asking *why it’s true*. Coeckelbergh (2025) warns that AI can alter “belief revision” – people may adopt claims from AI without the usual checks (Jose et al., 2025). In other words, the *process* of knowing (the pursuit of *epistemic justice*) might collapse into mere consumption of

AI-delivered assertions. This is especially dangerous if the AI is in error or carries hidden biases.

From a postcolonial view, epistemology is also about whose knowledge counts. If global AI degrees rely on large language models trained predominantly on Western-sourced data, they might perpetuate a subtle cultural imperialism. UNESCO observes that access disparities “*determine which knowledge, values and languages dominate the systems that influence education*” (UNESCO, 2025c). Without intervention, AI could become a vehicle that spreads a homogenized, Anglo-centric curriculum to all corners of the earth – a high-tech “*one-world*” syllabus reminiscent of the colonial export of European curricula. Local epistemologies – indigenous wisdom, minority theological perspectives – might be ignored or even deemed less authoritative by AI if they are underrepresented in its training data. This raises critical questions: Will an AI tutor acknowledge its own bias? Can it be fine-tuned to include voices from the Global South, or to say “this issue is debated among Christians in Africa versus America”? If not, students may receive a distorted picture of truth. As Spivak famously asked, “Can the subaltern speak?” – here we must ask, *can the subaltern be heard by AI?* Encouragingly, efforts like Meta’s NLLB and community-curated datasets seek to broaden the linguistic and cultural breadth of AI training (Meta, 2022). Likewise, Christian technologists could intentionally train AI on diverse theological sources (including non-Western theologians, etc.) to avoid a neocolonial epistemology.

Postcolonial Epistemic-Justice Standards: To prevent a new “one-world syllabus,” theological AI tools used in degree delivery must meet dataset provenance and linguistic inclusion standards. First, every model or corpus influencing instruction should ship

with Datasheets for Datasets and Model Cards that document sources, licensing, composition by geography and tradition, and disaggregated performance (Gebru et al., 2021; Mitchell et al., 2019; Bender & Friedman, 2018). Second, to align with UNESCO’s human-centred, equitable AI and with OECD’s transparency and inclusion principles, institutions should set minimum inclusion thresholds for minority languages and Global South theological sources in any fine-tuning or retrieval layer: for example, at least 30 percent of theological tokens from non-Western sources and three or more majority-world languages each with $\geq 50,000$ tokens of theologically vetted material, documented in a public model card with periodic bias testing across target languages. Governance should include a Global South Theological Advisory Panel with decision rights over corpus updates and evaluation protocols, per multistakeholder ethics guidance (UNESCO, 2023/2025; OECD, 2019/2024).

Finally, the authority of Scripture and spiritual epistemology must be maintained. A striking quote from a recent *Christianity Today* piece encapsulates the issue: “*You can’t build a life of faith based on information. You need transformation, formation from the people of God and from the Holy Spirit. And you can’t replace that.*” (Lucky, 2023). In a Christian academic context, this means no AI, however advanced, can replace the role of Scripture as ultimate truth norm and the role of the Holy Spirit in guiding believers into truth (John 16:13). AI might compile systematic theology from textbooks, but it cannot convict, cannot commune, cannot impart saving faith. Thus, while AI may deliver knowledge, Christian pedagogy must keep that knowledge submitted to biblical discernment. Teachers will need to explicitly teach students to critically evaluate AI outputs: *What does the Bible say? Does this answer align with a Christian worldview?* In

essence, the epistemological stance must shift from treating AI as an oracle to treating it as a useful but fallible tool. As one AI ethicist put it, “*We ought not to reassign our callings and responsibilities to the tools we invent*” (Lucky, 2023). The teacher’s task now includes training students in *digital discernment* – to neither naively trust nor cynically dismiss AI, but to exercise godly wisdom in using it.

Normative Authority Order and Design Principle: In Christian learning communities, authority must not drift from revelation to computation. The normative order is: Scripture as the sufficient and final norm for doctrine and practice (2 Tim 3:16–17; Acts 17:11), Spirit-led and church-accountable teachers as interpretive stewards (John 16:13; Eph 4:11–13), and AI as a subordinate instrument whose outputs are always open to biblical testing (1 Thess 5:21). The design principle follows: any AI-mediated pedagogy must make this authority order explicit, operationalized, and auditable in syllabi, platform prompts, review workflows, and student formation assessment.

Proposition P1 (Authority order → formation outcomes): Programs that (a) publicly declare the above authority order at program and course level, (b) document human theological review of AI-generated content at fixed intervals, and (c) train students in Scripture-first verification practices, will demonstrate higher measurable formation outcomes—including doctrinal fidelity, Scripture engagement, integrity in assessment, and communal participation—than otherwise similar programs that do not declare and implement such an order. This proposition is designed for accreditation audits: evidence includes a written authority statement in handbooks and syllabi, dated content-review logs tying AI outputs to faculty approvals, and learner-level artifacts evidencing Scripture-first

verification (e.g., verse-anchored rationales attached to assignments). Aligning with contemporary AI governance, these safeguards integrate risk management and traceability in education (ISO/IEC 23894; NIST AI RMF)

4.2. Theological, Ethical, and Institutional Implications of AI-Mediated Education

Theological and Spiritual Formation Implications. For Christian higher education, perhaps the gravest question is how AI-mediated learning affects spiritual formation and theological integrity. Christian degree programs aim not just to convey facts but to shape persons in the image of Christ (Gal. 4:19). Can an AI tutor facilitate that? There are promising possibilities: AI simulations could present moral dilemmas or ministry scenarios that help students practice applying biblical principles. For example, one educator suggests using AI to “*simulate [real-world] scenarios that challenge students to make decisions guided by spiritual discernment*” as training in wisdom (Ferguson, 2023). An AI could role-play a non-Christian seeking counsel, allowing seminary students to practice evangelistic conversations in a safe environment. AI can also help with biblical literacy by curating resources; e.g. an AI recommendation system might guide a student to Scripture and commentary relevant to a struggle (like an AI that, when asked about anxiety, suggests Philippians 4:6–7 or a Spurgeon sermon) (Ferguson, 2023).. Such uses show potential for AI to support Christian formation *as a tool*.

Yet the consensus among Christian scholars is that AI cannot substitute for the human and divine elements of spiritual growth. Russell Moore pithily noted, “*AI might teach, but it can’t preach*”. A chatbot can disseminate doctrinal content, but it has no *authority* to declare “Thus saith the Lord,” nor can it model

holiness or pray with a student in need. There is an incarnational gap: Jesus came in the flesh to make disciples, and Christian education similarly relies on embodied mentors and community. An AI, “*decidedly unembodied*,” lacks the relational soul-touch that occurs in a classroom discussion, a professor’s testimony, or a campus worship service (Lucky, 2023). Students may even develop ersatz “relationships” with AI personas (as some do with AI friends or therapists [Lucky, 2023]), but such ties, while emotionally intriguing, do not provide the covenantal love and accountability found in the Body of Christ. As AI engagement increases, we must heed the warning: “*Our ‘relationships’ with AI entities will contribute to our spiritual formation, even if we’re speaking to mere strings of ones and zeros*” (Lucky, 2023). That is, how a student interacts with AI – with discernment or credulity, humility or pride – will affect their character. If a student starts to treat the AI as all-knowing, they may subtly adopt a posture of *receiving truth without submission to spiritual authority*. If they use AI to cheat or shortcut hard work, it forms vice (sloth, deceit) rather than virtue. These are spiritual issues. Therefore, Christian educators must deliberately structure AI use in ways that encourage virtues like honesty, patience, and dependence on God, rather than foster spiritual acedia.

Theologically, reliance on AI raises the issue of authority in teaching truth. Protestant Christians hold Scripture as the final authority, with teachers serving under its authority. If an AI system generates theological explanations, whose interpretation is it giving? Likely it’s regurgitating the majority view from its data (which might skew liberal or secular). There is a real risk of subtle theological drift if AI content isn’t carefully reviewed. For example, an AI asked about a controversial doctrine might provide an answer that sounds plausible but lacks the nuance or fidelity a seminary would

require. If students accept those answers uncritically, error creeps in. Additionally, some fear a future where churches or schools could use AI “preachers” – but as one respondent noted, “*you can’t build a life of faith based on information*” an AI gives (Lucky, 2023). True faith comes by hearing the Word through a preacher sent by God (Rom. 10:14–17) and through the work of the Spirit. AI has no soul, and thus no spiritual authority or efficacy. It may assist the teacher, but it must not replace the pastor-professor who knows their flock (or class) and can speak to heart issues. In essence, AI should be a *Priscilla* (explaining Apollo’s teaching more accurately in the background), not an *Apollo* addressing the congregation in the forefront.

Ethical and Data Stewardship Concerns. The implementation of AI in education carries numerous ethical responsibilities. One is privacy and data security. AI tutoring platforms gather extensive data on learners – from academic performance to possibly biometric or engagement metrics. As one Christian school leader notes, “*AI involves accumulating and analyzing large amounts of student data*,” which raises privacy concerns if not “adequately protected” (Ferguson, 2023). Christian ethics demands treating students’ information with utmost care, as a matter of respecting their dignity and protecting the vulnerable. Institutions must ensure compliance with data protection laws and go further to ask: who owns the student data? Is it sold or used to refine commercial algorithms? Such practices could exploit students. Moreover, in some countries, government use of AI surveillance could put Christian students at risk (e.g. tracking religious activity). These dilemmas call for robust policies and transparency about AI systems. For instance, if an AI writing assistant is used, students should know what data of theirs is stored and have the ability to opt out.

Another ethical challenge is algorithmic bias and fairness. If the AI is translating or grading, does it work equally well for all languages and cultures? Early AI tools have shown biases against certain dialects or minority viewpoints. For example, an AI might misunderstand non-standard English phrasing or undervalue an argument referencing local culture if its training data is mostly Western. This could lead to unfair academic outcomes (e.g. systematically lower feedback for students writing in a “non-Western” style). Ensuring fairness may require diversifying training data and involving cross-cultural teams in AI development. It also means constantly evaluating AI outputs for inadvertent prejudices – an area where accrediting bodies might set standards (e.g. requiring bias audits of AI curriculum tools).

Academic integrity is a further ethical piece. Generative AI makes it easier for students to cheat or plagiarize by producing essays or answers. Educators will need to adapt assessment methods (more oral exams, in-person components, or AI-resistant tasks) (Jose et al., 2025). But on the positive side, AI can also help detect plagiarism or coach students in avoiding it. The line between using AI as assistive (acceptable) and as a crutch (unethical) must be defined and taught clearly as part of digital literacy and Christian integrity. The concept of “*faithful presence*” applies: even in virtual learning, students must be encouraged to do their work “as unto the Lord” honestly, whether or not an AI could do it for them.

Institutional and Accreditation Challenges: At the institutional level, AI-driven global programs upend many assumptions. Accreditation and quality assurance become both more complex and more crucial. How does an accrediting agency evaluate a degree where AI delivers half the lectures or grading? New benchmarks will be needed, such as auditing the

AI’s content for accuracy and theological soundness, ensuring that learning outcomes are met equivalently across different language cohorts, and verifying that students truly engage with material (not just click through AI modules). Accrediting bodies may need to require a human faculty oversight ratio – for instance, that each AI course has a qualified instructor of record who reviews assessments and is available for student questions. They will also have to craft policies on AI authorship (e.g. in dissertations or projects, how to acknowledge AI assistance). This is uncharted territory, but some are beginning to discuss it. The International Council for Distance Education (ICDE) has analyzed quality issues in online learning globally; building on such work, one can envision international standards for AI in education to ensure consistency and trust.

Financially and organizationally, traditional Christian colleges could face existential questions. If a high-quality, fully AI-mediated degree from an “International Christian University Online” becomes available for, say, one-tenth the cost of a residential program, many students (especially in the Global South) will choose the cheaper option. This threatens the tuition model of brick-and-mortar institutions. Christensen’s prophecy that many campuses would “disappear or merge” under disruptive pressure (King, 2020) may be realized in part through AI-based competitors. We may see the rise of a few global Christian mega-universities, able to serve tens of thousands through AI, while smaller Bible colleges struggle. This consolidation could have upsides (efficient use of resources, broader reach) but also downsides – loss of local contextual training, one-size-fits-all curricula, and less personal student-teacher interaction. It could also concentrate academic authority in a handful of institutions (or tech companies partnering with them). There is a real concern

about Big Tech's role: if companies like Google or Meta provide the AI backbone for Christian education at scale, do those companies then wield influence over curriculum or policy? For instance, if a tech platform deems biblical views on gender as "hate speech," would an AI refuse to teach certain doctrines? Institutional autonomy and mission fidelity could be at stake. Christian institutions must thus enter AI partnerships with eyes open and, where possible, favor open-source, mission-aligned technologies that they can control (such as fine-tuning an open model on their own theological content, rather than using a generic secular AI).

Lastly, faculties and staff will need re-skilling and reorientation. Professors may become more like curriculum curators and mentors than primary content deliverers. Some could sadly become redundant if a single AI expert system can do what dozens of adjuncts did. Managing these transitions ethically – retraining faculty to work with AI, not simply replacing them – is an institutional imperative reflecting Christian ethics of treating laborers with dignity (1 Tim. 5:18). Encouragingly, some theological educators are proactively engaging in AI: e.g. the ICETE academy has courses on "*AI and Theological Education*" to help faculty leverage these tools wisely (Tzeng, 2025). Such efforts will need to scale up across Christian academia.

In sum, the introduction of AI at the heart of higher education presents a thicket of ethical and institutional issues. These must be navigated with a commitment to love of neighbor (protecting students' well-being), justice (ensuring fair access and avoiding bias), and stewardship (sustaining institutions' mission under changing conditions).

4.3. Eschatological and Cultural Reflections in a Biblical Lens

The rapid growth of AI in global education not only raises practical concerns but also invites reflection on deeper spiritual and eschatological questions. For Christians, technology's trajectory is ultimately assessed in light of God's redemptive story – creation, fall, redemption, and consummation. How might AI-enabled education fit into that narrative?

One biblical motif is the Tower of Babel (Gen. 11:1–9) versus Pentecost (Acts 2:1–11). At Babel, humanity's technological unity (one language, one project) led to pride and an attempt to reach heaven by human effort, which God thwarted by confusing languages. In contrast, at Pentecost, God miraculously allowed people of many languages to understand the gospel, redeeming linguistic diversity to His glory. AI's promise to "reverse Babel" by eliminating language barriers has echoes of both stories. On one hand, it can be seen as a "*Babel fish*" gift – enabling instant understanding across tongues, much like Douglas Adams' fictional device (Attebury, 2024). A theologian recently used AI to translate 16th-century Latin works into English, accomplishing in hours what would have been impossible alone (Attebury, 2024). This retrieval of otherwise inaccessible knowledge is a clear good, suggesting AI as a tool in service of the Pentecost vision of every tongue hearing truth. Indeed, one missiologist said with AI "*retrieving otherwise inaccessible scholarship will begin to seem like science fiction*" turned reality (Attebury, 2024) – a positive reversal of Babel's confusion for the sake of gospel understanding. Ministries are already leveraging AI to accelerate Bible translation into minority languages (Cozens, 2024), aligning with the biblical mandate to disciple "*all nations*" and tongues (Matt. 28:19, Rev. 7:9).

On the other hand, we must beware of Babel-like hubris in AI's global ambitions. A world where all education flows through a few

AI networks could become a kind of monolithic system that sidelines God. If humans begin to trust in a unified AI for solutions to every problem (*“nothing they plan to do will be impossible for them,”* Gen. 11:6), they might repeat Babel’s error of self-sufficiency. The Christian worldview reminds us that *“the fear of the Lord is the beginning of knowledge”* (Prov. 1:7); any pursuit of knowledge devoid of reverence for God can lead to idolatry of intellect or technology. C.S. Lewis warned of “men without chests” – highly educated people who lack virtue. AI could inadvertently mass-produce such individuals if spiritual formation is neglected. Moreover, some Christian thinkers identify *“powers and principalities”* behind cultural systems (Eph. 6:12). One scholar suggested we consider AI not as personal “Selves” but as powerful systems that can either reflect godly truth or demonic deception (Lucky, 2023). If an AI-driven educational regime ever promoted a false ideology (imagine an AI that subtly indoctrinates students with anti-Christian values globally), that would resemble an oppressive principality. Thus, vigilance and prayer are needed that AI remains a *tool* under God, not a tower against God.

Eschatologically, discussions of advanced AI often veer into end-times anxieties or utopias. Some secular voices worry about superintelligent AI “outsmarting and replacing us,” but seasoned Christian technologists respond that the real issue isn’t rogue robots but the sin in human hearts (Lucky, 2023). As the Lausanne Movement authors write, *“AI does not pose an existential threat to humanity, but we must be aware of the concerning ways it is shaping our understandings of God, ourselves, and the world”* (Kim et al., 2025). In other words, the biblical view is that until Christ returns, *sin* – pride, greed, deceit – is the ultimate culprit, not AI itself (Lucky, 2023).

Fear of “robot overlords” can be an opportunity for apologetics: it reveals a cultural anxiety about what it means to be human, to which Christians can speak hope (Lucky, 2023). We know humanity’s hope isn’t in out-innovating death or achieving a techno-utopia, but in the resurrection and Christ’s return. We also trust in God’s sovereignty that we will not accidentally create something that thwarts His plan. As one theologian put it, *“we’re bolstered by confidence that Jesus is returning... We believe the best is yet to come”*, so we need not entertain doomsday scenarios as final (Lucky, 2023). That said, certain developments (like ubiquitous surveillance or a centralized control of information) do evoke imagery from Revelation about a coercive world system. Christians should thus remain discerning about issues of religious freedom and human rights in AI deployment – resisting any use of AI that could enable authoritarian control over worship or belief (e.g. social credit systems that penalize religious activity).

Culturally, AI-enabled education could either hegemonize or contextualize learning. The biblical pattern favors respecting “every tribe and tongue” (Rev. 7:9) and the incarnational approach of meeting people within their culture. If AI degrees simply export Western content, they might unintentionally continue a colonial legacy. But if used creatively, they could facilitate a *truly intercultural* exchange of knowledge. Envision a global virtual classroom where Western students learn church history from an African professor (with AI translating Swahili to English) while African students learn Greek from a Korean tutor – a foretaste of the eschatological gathering of the nations. Such cross-pollination can enrich the global Church’s educational diet and break down ethnocentrism. It aligns with Romans 12:2, as learners from any culture can be *“transformed by the renewing of [their] mind”* together in Christ, rather than all

being conformed to one dominant cultural pattern. Romans 12:2 also warns not to be conformed to the world's pattern. In the AI age, "the world's pattern" might include a technocratic mindset that idolizes efficiency, data, and pragmatism. Christian education must consciously resist that, ensuring that our embrace of AI does not squeeze us into the world's mold, but rather that we use AI in a *non-conformist* way – one that witnesses to kingdom values of humility, community, and truth in love.

Finally, a biblical eschatology is ultimately hopeful and mission-driven. We believe history is heading toward the full knowledge of God covering the earth (Hab. 2:14). Could AI be part of God's providence in that, a "good gift" for the Church's mission? Some Christian innovators suggest that "*who's to say God isn't the originator of this technology?*", intending it as a tool for good (Lucky, 2023). Certainly, the explosion of multilingual AI capabilities seems timely with a new surge of gospel needs. As an example, translation AI allowed a church in Europe to use Microsoft Translator live in services so immigrant members could "access the sermon in their own language" – making the community more equitable and unified (Cozens, 2024). Such uses hint at a redemptive horizon where AI is harnessed to fulfill Joel 2:28 – knowledge of God poured out on all flesh (augmented by all languages). But that future depends on our faithful action in the present. As we will outline in recommendations, the Church and Christian educators must proactively shape AI's development and deployment, or risk being shaped by secular forces. By engaging now – articulating ethical guidelines, developing Christ-centered content, and preparing students to be *salt and light* in an AI-permeated world – we can trust that AI will not usher in a technocratic dystopia, but can be part of God's

providential plan to "*restore all things*" in Christ (Eph. 1:10). With eyes on the Eastern sky, we educate and innovate not from fear, but from faith and love, knowing our labor in the Lord, even through AI, "*is not in vain*" (1 Cor. 15:58).

4.4. Global Case Examples and Current AI Tools Enabling Multilingual Education

To ground the above analysis, we consider a few illustrative cases and technologies demonstrating how AI is already transforming multilingual learning:

Case 1: "Global Seminary in Many Tongues." The *Lausanne Movement* reports that SIL International (a leading Bible translation organization) has developed machine learning models for over 300 minority languages, including text-to-speech and translation, specifically to assist in Bible translation and education (Cozens, 2024). This has enabled faster translation of Scripture and related curriculum, with AI handling initial drafts and humans doing review. In local churches, similar tech is used: one church employs real-time AI translation during services so that congregants from various nationalities each see the sermon notes in their own language on their phones (Cozens, 2024). These examples show AI breaking down language walls in Christian teaching and fellowship *today*. They also illustrate a model of human-AI collaboration: AI handles the heavy linguistic work, while people ensure accuracy and then engage relationally around the content.

Case 2: AI Tutor for Rural Africa. In Ghana, a startup called Mavis Computel introduced AI-powered tutoring tablets in remote schools (Peters, 2025). These devices tutor children in core subjects without need for an on-site teacher, using local languages and voices. Early outcomes show improved basic

skills where previously students had no regular instruction. However, challenges like limited electricity and the need for cultural context in some lessons were noted. The program addresses teacher scarcity, but it emphasizes the continued need for community involvement (e.g. a village facilitator to supervise and integrate the AI lessons). The implication for global higher education is that AI can reach where human teachers aren't available, but it works best with *hybrid models* that include local support and contextualization.

Case 3: Khan Academy's "Khanmigo" and beyond. A mainstream example is Khan Academy's Khanmigo, an AI-powered tutor based on GPT-4, which interacts with students in a conversational way for a range of subjects. It even can role-play historical or literary characters to make learning engaging. During trials, students who used the AI assistant showed notably higher persistence in solving problems (because the AI gave tailored hints rather than full answers). This points to how AI can be tuned to *promote learning, not just give answers*. If Christian educators design similar AI tutors – say, a "BibleMigo" – it could quiz seminary students on Greek vocabulary, provide hints for tough parsing, but intentionally refrain from simply translating the whole verse (thereby encouraging the student's growth). These design choices reflect pedagogical values. It's a case-in-progress of how thoughtful guardrails can make AI a *formative* tool rather than a shortcut.

Case 4: OpenAI Whisper in Mission Training. A missions organization working in South Asia has started using OpenAI Whisper to transcribe and translate training videos for pastors in multiple local languages. Previously, an English seminar on expository preaching would impact only those who knew English or

when an interpreter was present. Now, they record the seminar and use Whisper to generate subtitles in, for example, Hindi and Telugu. While not perfect, this drastically lowers the barrier for non-English-speaking pastors to benefit from global teaching resources. The organization did note that initial transcripts had some errors with biblical terms (e.g. "Pharisee" transcribed oddly), so they are creating a glossary to fine-tune the model. This illustrates that AI tools can greatly extend reach but often require domain-specific tweaking – in this case, ensuring theological terminology is handled correctly.

The AI tools enabling these scenarios have been mentioned: Whisper (speech recognition), NLLB-200 (machine translation), large language models like GPT-4 (tutoring and content generation), and emerging systems like Google's Gemini (multilingual conversational AI). These represent a rapidly evolving ecosystem focused on the multilingual, multimodal capabilities critical for global education. Meta's NLLB, for example, improved translation quality by 44% on average and over 70% for some low-resource African languages (Meta, 2022), an impressive leap that makes things like accurate Swahili subtitles on a MOOC or Oromo translations of textbooks suddenly feasible. Open-sourcing these models (as Meta and OpenAI have done) is also key, as it allows Christian educators and minority communities to adopt and adapt the tech without prohibitive costs (OpenAI, 2022). The trend toward openness aligns with a kingdom mindset of equipping the "least of these." It will be important for Christian institutions to support and utilize such open projects, lest they become overly dependent on proprietary systems that could change terms or restrict gospel-related content later.

Figure 2. Languages and Education – The Global Gap

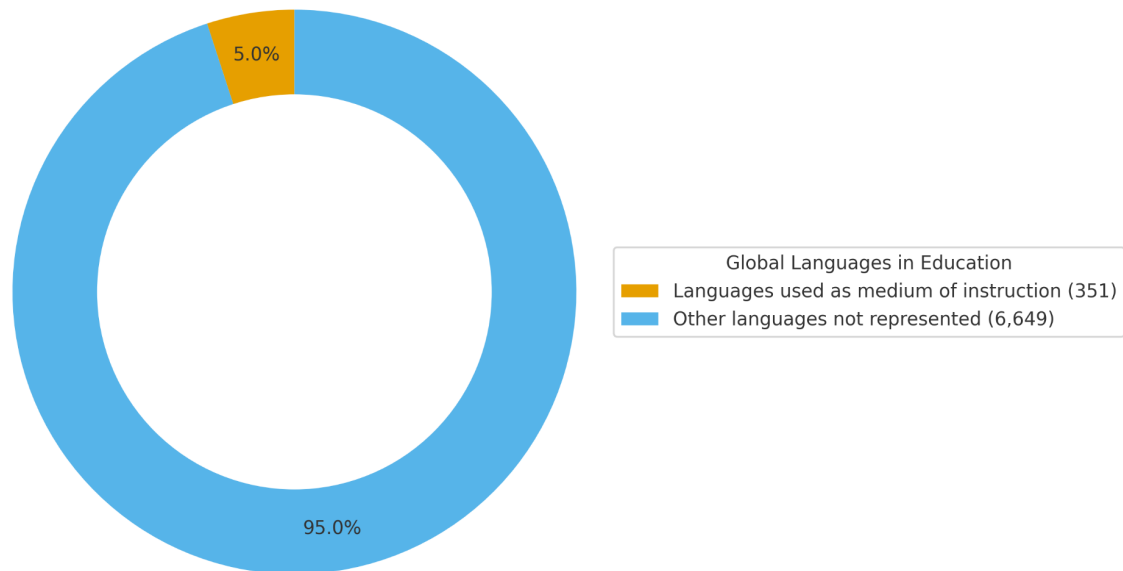


Figure 2: Languages and Education – The Global Gap. This chart illustrates the massive disparity between the world's linguistic diversity and the languages used in formal education. Out of ~7,000 languages spoken today, **only about 351 (5%)** are mediums of instruction (UNESCO, 2025b). The vast majority of languages (95%) are “other languages” not represented in schools or universities. AI-enabled multilingual programs aim to reduce this gap by leveraging translation, speech recognition, and localized content creation so that far more languages can be vehicles of learning. Source: UNESCO, 2025b.

While these cases and tools show promise, they also underscore that technology alone doesn't solve educational problems – implementation and context matter greatly. Each success came with learnings: the need for human oversight, the importance of cultural nuance, the value of open access, and so on. As we turn to recommendations, we carry forward this insight that AI is a powerful instrument, but one that must be wielded with wisdom, love, and humility.

5. Conclusions and Recommendations

5.1 Institutional and Accreditation Standards: Institutions and accreditors should adopt three inspectable standards with clear

evidence requirements, harmonized to current AI governance frameworks (ISO/IEC 23894; NIST AI RMF; UNESCO Guidance; OECD Principles). **[1]. Standard S1: Disclosure, Oversight, and Human Accountability:** Each program will specify the percentage of contact hours mediated by AI for every course and disclose this to students at enrolment and in the syllabus; name a faculty of record for every AI-supported learning activity; and maintain documented content-review intervals for any AI-generated theological or ethical material (e.g., prior to release; mid-term; end-term), with time-stamped approvals. Evidence comprises syllabi, LMS disclosures, and review logs linked to course outcomes. Outcome domains: Learning & Pedagogy; Spiritual Formation &

Doctrinal Fidelity. **[2]. Standard S2: Data Ethics and Privacy Stewardship:** Programs will publish a data-minimization policy for any AI tutoring or analytics; set retention periods for conversational and telemetry data with deletion proofs; provide opt-out mechanisms without academic penalty; and publish a third-party processor register with purpose, legal basis, and transfer safeguards. Evidence includes policy URLs, retention schedules, opt-out workflows, and vendor registers aligned to risk-management functions of GOVERN/MAP/MEASURE/MANAGE (NIST AI RMF 1.0). Outcome domains: Governance & Data Ethics; Spiritual Formation & Doctrinal Fidelity (NIST, 2023). **[3]. Standard S3: Bias, Inclusion, and Continuous Evaluation:** Before deployment, programs will conduct a pre-deployment bias audit across all target languages and theological sub-traditions identified in the curriculum; set acceptance thresholds for accuracy and harmful-content rates by language; and commit to annual re-evaluation with corpus updates overseen by a Global South Theological Advisory Panel, documenting decisions and model changes in publicly accessible model cards. Evidence includes audit reports, thresholds, advisory minutes, and updated model cards. Outcome domains: Access & Equity; Governance & Data Ethics; Learning & Pedagogy.

Accrediting Bodies and Educational Regulators: [1]. Update Standards to Address AI – Accreditation agencies (and associations like ICETE for theological education) should formulate guidelines on AI usage. This might cover required disclosure (students should know when an AI, not a human, is answering them), expected competencies (e.g. students should demonstrate *AI literacy* as part of information literacy), and limits (perhaps caps on how much of a program can be automated). The goal is to ensure AI-driven degrees meet the same or

higher quality as traditional ones. Sharing best practices globally (via ICDE or UNESCO forums) will help standardize these approaches. **[2]. Quality Assurance Mechanisms** – Require that institutions have processes to regularly audit the AI's performance and content. For example, an external reviewer could sample AI-generated feedback given to students to ensure it's pedagogically sound and unbiased. Also, mandate data ethics compliance: institutions should prove they safeguard student data used by AI (encryption, informed consent, etc.). Accrediting teams might include an *AI specialist* in site visits in the near future. **[3]. Cross-border Recognition** – Work toward mutual recognition agreements for online AI-based programs, since these will be international by nature. A student in Kenya earning a degree from a U.S. online Christian university should have confidence it's recognized locally. Regulators may need to adapt rules for degree granting across jurisdictions, ensuring that if quality is there, bureaucratic barriers don't hinder access. This includes recognizing credits for AI-facilitated learning experiences (which might be competency-based or self-paced). The World Bank has highlighted the need for policy frameworks to accommodate innovative education delivery (Peters, 2025) – accrediting bodies can be proactive rather than reactive here.

AI Developers and EdTech Companies: [1]. Collaborate with Educators and Theologians – Tech firms creating AI for education should actively involve educators (including Christian ones) in design. A theological AI tutor, for instance, would benefit from input by seminary faculty to ensure it references Scripture correctly and respects denominational distinctives. Developers should also include cultural and linguistic experts for localization. An example to emulate is Meta's grant program encouraging nonprofits to use and improve NLLB for African languages (Meta,

2022) – such collaboration spreads expertise and ensures the AI serves real needs. **[2]. Incorporate Ethical and Faith Considerations** – Developers, especially those who are Christians, should advocate for and build in ethical guardrails. This includes addressing bias (as discussed), transparency (making AI decisions explainable where possible), and respecting religious content. For instance, content filters on AI platforms should not erroneously flag Bible verses as inappropriate (a problem seen in some AI moderation). As AI & Faith forums have suggested, a diverse team of ethicists, including theologians, can help foresee moral issues and impart values into AI systems (AI and Faith, 2024). **[3]. Focus on Low-Resource Languages and Accessibility** – Commercial incentives often neglect languages with fewer speakers or regions with lower profit potential. Yet “billions...can’t access content in their native language” (Meta, 2022). Developers should extend models to as many languages as feasible (like Google expanding Gemini to 100+ languages [Barkley, 2024]). They should also optimize AI for low-bandwidth or offline use (e.g. on-device models for areas without steady internet). This aligns with Christian values of caring for the “least of these” and can open new markets in the long run. **[4]. Protect Privacy and Security** – EdTech companies should set high standards for data protection, ideally exceeding legal minimums. Christians in tech might recall the concept of *imago Dei* – each user’s data represents a person with dignity. Commit to not misuse data for advertising or undisclosed purposes, and be transparent in user agreements. If AI records student conversations (for tutoring), ensure those are stored safely and deleted when no longer needed. Any biometric data (like attention tracking via webcam) should be approached with extreme caution or not at all, given potential for abuse. Building trust through privacy stewardship is not just ethical but crucial

for user acceptance, especially among faith communities historically wary of surveillance.

Christian Missions and Ministry Organizations: **[1]. Leverage AI for Theological Education in Missions** – Organizations involved in pastoral training, discipleship, and church planting should treat AI as a strategic opportunity to scale up training. Much of the global church lacks access to formal theological education. AI-powered degree programs could allow a village pastor to get an accredited diploma through mobile phone in his language. Missions groups can partner with academic institutions to contextualize content and provide on-the-ground facilitation (e.g. a local mentor for cohorts of students taking an online Bible college course). As Lausanne’s report noted, “*advances in AI present the church with a special chance to better our Great Commission work*” (Kim et al. 2025). Embrace that chance by integrating AI tools in leader development, evangelism follow-up (AI chatbots answering seekers’ questions with biblical truth [Kim et al. 2025]), and Bible translation checking. **[2]. Provide Spiritual Support and Discernment Resources** – Missions must also mitigate risks of spiritual harm. Develop materials on *AI discernment* – perhaps a small group curriculum on using technology wisely, or guides for pastors on common AI-related questions their flock might have (e.g. “Is it okay to use AI for devotional help?”). Just as missionaries taught new literates how to read the Bible, now they may need to teach *digital literacy plus spiritual discernment* in using AI content. Ensuring that local church leaders can correct any AI-provided misinformation or heresy is vital. Encourage a posture of testing everything against Scripture (Acts 17:11). **[3]. Advocate for Justice and Access** – Christian NGOs can be voices for equitable AI deployment. For example, pushing for AI that works in sign languages and serves

those with disabilities (hearing or visual impaired) follows Jesus's heart for the marginalized. Missions could sponsor projects to create open-source AI resources for minor languages – a modern equivalent of creating alphabets and grammars for unwritten languages, as missionaries often did. This advocacy also means watching how governments use AI in education. If, say, a regime uses AI curricula to promote ideologies antithetical to the gospel or to monitor religious minorities, Christian organizations (in partnership with human rights groups) should raise awareness and stand for truth and freedom.

Across all these recommendations, a unifying theme is intentionality. AI will not automatically bend toward just or holy outcomes; it must be directed, shaped, and sometimes restrained by people of conviction. As Christian leaders in various spheres, we must *"understand the times"* (1 Chr. 12:32) and proactively engage so that in 10 or 15 years we do not lament what AI did to education, but celebrate what God did through it.

5.2. Foresight: Navigating AI, Surveillance, and Missional Futures (10–15 Year Outlook): Projecting a decade or more into the future, we foresee a world where AI is even more deeply woven into education – and society at large – posing new challenges and opportunities that Christians must be prepared to address. This foresight section sketches three critical areas: the convergence of AI with surveillance and control, potential eschatological or existential threats often discussed in society, and hopeful visions of redemptive use in the missional context.

AI-Surveillance Convergence and Threats to Freedom: By 2035, AI-driven analytics and surveillance could make education a highly monitored space. Already, some online proctoring tools use AI to watch students

through webcams during exams. It's conceivable that entire digital classrooms will be recorded and analyzed: AI might flag if a student seems disengaged or if discussions deviate from approved curriculum. Authoritarian governments might exploit this to enforce ideological conformity. For example, one can imagine a scenario (not far from reality in some countries) where an AI system monitors all religious education content and reports "extremist" material to authorities. A Christian course teaching that Jesus is Lord could be flagged if the state ideology is atheistic or another religion. This raises the specter of persecution via AI – believers and educators could be tracked in unprecedented ways. The "surveillance state" combined with AI's predictive power might attempt to preempt gatherings or censor resources quickly. In terms of Revelation metaphors, it is not hard to see how a system controlling who can *"buy or sell"* (Rev. 13:17) might be partly technological – e.g. digital economies where AI IDs you and can exclude those not toeing the line. While we should be careful not to jump to wild conspiracy, we must acknowledge that such totalizing use of technology is possible and in some places, plausible.

Christians should respond by championing digital freedoms and human rights. In the next decade, involvement in discussions on AI ethics at national and global levels is imperative (some Christians already participate in the UN's AI and ethics initiatives). Pushing for regulations that protect privacy, religious freedom, and the ability for alternate educational systems to exist is crucial. We might also need to develop secure, perhaps decentralized or offline, educational platforms for believers under hostile regimes – an AI-enhanced "underground university" akin to the underground church. Technologies like federated learning (AI improving without centralizing data) could help,

as they allow use of AI tutors without exposing individual data to prying eyes. Ultimately, our stance should be that surveillance AI must be constrained by respect for God-given dignity and freedom of conscience. If we abdicate this arena, we risk a future where Christian education either goes dark or goes underground in much of the world. Preparedness, both technical and spiritual, will be key.

Eschatological and Existential Questions: The 2020s have seen rising public concern about whether AI could “escape human control” or even attain a form of personhood. Tech luminaries have openly pondered if superintelligence might render humans obsolete (Lucky, 2023). By the late 2020s or 2030s, AI systems will be far more advanced – possibly self-improving, deeply integrated with biotechnology (brain-computer interfaces for learning?), and present in humanoid robots or augmented reality teachers. This will blur lines between human and machine roles even further, forcing the question, “*What does it mean to be human?*” As one Christian expert noted, “*we find ourselves...not only uncertain about where humanity is going but about what being human is*” (Lucky, 2023). The church will need a robust theological anthropology to address this confusion. Genesis 1 teaches that humans uniquely bear God’s image; no machine, however clever, can carry the breath of God in the way we do (Lucky, 2023). Voices like Brent Waters, Rosalind Picard, and others in the AI & Faith community are already articulating such points. In an education context, we must continually affirm: students are not machines and should not be treated as such; and AI is not a soul and should not be treated as such. This may seem obvious, but as AI companionship and tutoring grows, lines blur emotionally. A student might bond with an AI mentor and ask spiritual questions – we should celebrate curiosity but ensure they are ultimately pointed to human

mentors and God’s Word for true spiritual counsel.

Eschatologically, some have speculated whether AI could be part of end-times deception – e.g. a convincing false teacher or even an “image of the beast” (Rev. 13:14–15) that speaks. It’s intriguing that an AI “Jesus avatar” that answers people’s questions was recently created as art in Europe (GovTech, 2024). It spoke multiple languages and drew crowds – a taste of how people seeking spirituality might turn to a digital “oracle.” Could such things play into great end-time deception? Possibly, if people are not discerning. The apostle Paul wrote of a future man of lawlessness with counterfeit signs (2 Thess. 2:9–10). One could imagine AI-generated miracles or perfectly tailored lies that lead many astray. However, dwelling in fear of specific technologies as “the Antichrist” is not productive. Instead, the church should inoculate believers with truth and critical thinking. Teach eschatology soundly: our hope is in Christ’s visible return, and no AI marvel should shake those with rooted faith. Encourage believers to practice discernment with any teaching (Gal. 1:8 – even if from an “angel” or AI!). In other words, **spiritual vigilance** is the antidote to eschatological threats, whether they come via AI or otherwise. And we take comfort that God remains sovereign: “*the real problem is sin*”, not silicon (Lucky, 2023), and Jesus has overcome sin and the world.

Redemptive Missional Futures: Looking ahead with hope, we envision several redemptive outcomes by 2035 if Christians innovate and engage with AI for good: **(i). The Multilingual Great Commission Realized:** By God’s grace, AI could help ensure that every people group has access to scripture and quality Christian education in their language. Projects like FaithTech and Biblical MogRT (hypothetical future initiatives) might use AI to accelerate Bible translation such that by 2033

(the 2000th anniversary of the resurrection, notably) every language has at least the New Testament and basic discipleship materials. AI assistants might be conversant in those languages to teach literacy and doctrine. Thus, when we read “*every nation, tribe, people and language standing before the throne*” (Rev. 7:9), we can imagine that in the preceding years every language was also reached with teaching – possibly aided by technologies unimaginable to prior generations. This is a distinctly optimistic scenario, but not out of reach if current trends continue and the global church cooperates with technology experts. **(ii). AI-Augmented Human Educators Changing Lives:** Far from replacing teachers, we foresee AI making teachers even more impactful. A future Christian professor might have AI handle all the translation and admin, allowing her to personally mentor students across 10 countries. She could host a virtual reality seminar where, through AI interpretation, a farmer in Indonesia and a barista in Brazil debate theology together, as she moderates – a taste of the global church learning as one. With AI, educators could also better follow up with alumni; imagine an AI that ten years on pings a graduate with resources relevant to their current ministry context, effectively continuing lifelong learning. This aligns with the idea of “*equitable human-machine co-creation*” for inclusive education that UNESCO advocates (UNESCO, 2025c). In kingdom terms, it is using tools to multiply loaves and fishes – extending the reach of each educator to feed multitudes without losing the personal touch (since the AI takes care of the “logistics”). **(iii). Redemptive Tech Communities:** By 2035, we may have strong networks of Christian AI professionals who drive ethical innovation. The seeds are already there (e.g. *AI & Faith* consortium, Lausanne’s Digital Network). These communities can produce open-source AI models trained on ethically sourced and theologically robust

datasets, which schools and ministries can use freely. This might free Christian education from dependency on Big Tech and ensure tools are aligned with our values. A concrete dream: a “*Galatians*” AI model (so named to echo Paul’s confrontation of Peter) – one that has bias checks to prevent cultural favoritism, that has a built-in “fruits of the Spirit” metric (does content reflect love, joy, etc.), and that flags content that contradicts core Christian doctrines for human review. Such features would be redemptively peculiar in the AI landscape, a witness in themselves.

As we plan for these futures, we should also remain humble and open to God’s surprises. The best-laid tech roadmaps can be upended by new inventions or by global events (who foresaw a pandemic pushing everyone online so quickly?). Flexibility and a constant return to first principles – Scripture and the Holy Spirit’s guidance – will help the church navigate whatever comes. Our eschatology is one of victorious hope: no matter the threats (be it a “surveillance beast” or a digital deception), Christ will preserve His people. And our missiology is one of creative obedience: using every available means to make disciples of all nations. AI, in its multilingual power, could be akin to the Roman roads of Paul’s day – a tool that facilitated the rapid spread of the gospel. Roman roads carried paganism too, but Christians commandeered them for Christ. So with AI: it will carry sin and error, but by God’s grace we can also send the gospel and truth along its circuits to the ends of the earth.

5.3. Conclusion: AI-powered, multilingual degree programs sit at the intersection of tremendous promise and sobering peril. They epitomize disruptive innovation, holding the potential to democratize access to education for “the least of these” in ways earlier generations could only dream – envision degrees that reach every language, knowledge set free

from linguistic empire (Meta, 2022). Yet they also force us to wrestle with issues of academic authority and spiritual authenticity: Will AI be our servant or our master in the learning process? This paper has argued that by synthesizing insights from postcolonial theory, disruptive innovation, and biblical theology, we can chart a path that maximizes the redemptive impact of these programs while mitigating their risks. Postcolonial theory reminds us to keep the margins in focus – to design AI education that empowers the historically voiceless, rather than recapitulating colonial patterns of knowledge domination (Maddix, 2018). Disruptive innovation theory pushes us to be bold and creative, yet also to anticipate institutional upheavals and steer them toward just outcomes (King, 2020). Biblical theology centers us on the unchanging core: that all our learning is for naught if it doesn't lead to wisdom rooted in the fear of the Lord and love of neighbor (Prov. 1:7, Mark 12:30–31).

Ultimately, the question is not simply “*What can AI do in education?*” but “*What should we do with AI in education as followers of Christ?*”. The findings here suggest that with intentional action, AI-fueled degrees can indeed reshape access by breaking linguistic and geographic barriers (fulfilling a kind of reversal of Babel for God's glory) (Attebury, 2024). They can enrich pedagogy through personalized and adaptive learning – if kept subservient to human mentorship and directed toward cultivating virtue (Ferguson, 2023). They inevitably alter epistemology, shifting how knowledge is obtained and validated – a shift that demands Christians reassert the primacy of Scripture and the need for critical, communal discernment in the face of AI's confident answers (Jose et al., 2025; Lucky, 2023). The theological, ethical, and institutional risks are real: the dehumanization of education, erosion of privacy, spread of bias, loss of local institutional identity,

and spiritual shallowness. Yet none of these is insurmountable. With wise governance, robust ethics, and the power of the Holy Spirit at work in committed educators and technologists, these risks can be managed and even turned into opportunities for growth (e.g. renewed emphasis on what truly makes education “Christian”).

In Proverbs 1, Wisdom is personified as calling out at the city gate – in our context, perhaps Wisdom calls out in the digital gate of the internet, inviting us to fear the Lord in our use of AI. “*The prudent see danger and take refuge*” (Prov. 22:3), so we have addressed dangers; “*the wise inherit honor*” (Prov. 3:35), so we have also envisioned honorable outcomes to pursue. If the global Church approaches AI-enhanced education prayerfully and proactively, the next decade could see an expansion of quality Christian education to places and peoples never before reached. A rural teen in the 10/40 window might earn a Bible degree and become a pastor, entirely through materials in his mother tongue delivered by AI and nurtured by an online mentor. A young woman in a restrictive country might, through an encrypted AI learning app, receive advanced scientific training from a Christian worldview, preparing her to be salt and light in her field. Such stories would represent a fulfillment of the church's calling to “*make disciples of all nations...teaching them to obey all that I have commanded*” (Matt. 28:19–20) – now with “all nations” including all linguistic nations, and teaching happening through new modes but the *same gospel*.

In conclusion, AI is a powerful *talent* entrusted to our generation (Matt. 25:14–30). We cannot bury it in fear, nor abuse it in pride. We must invest it – ethically, creatively, missionally – so that when the Master returns, we may present back to Him an educational landscape where knowledge was multiplied *and* sanctified, where technology bowed to the service of truth,

and where learners from every tongue and tribe were equipped for both marketplace and ministry. In that day, perhaps we will find that AI was not a nemesis or idol, but simply one more tool that the Lord redeemed for His purpose: “*that the earth may be filled with the knowledge of the glory of the LORD as the waters cover the sea*” (Hab. 2:14). Amen.

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